

Figure 1. White light dark field system

FIG. 1

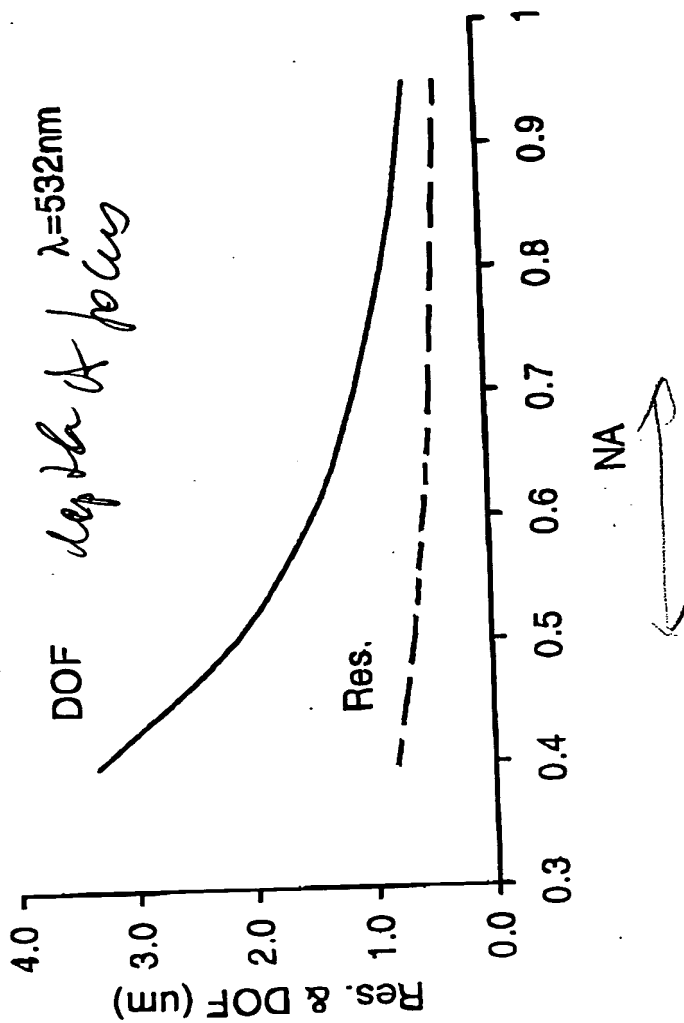
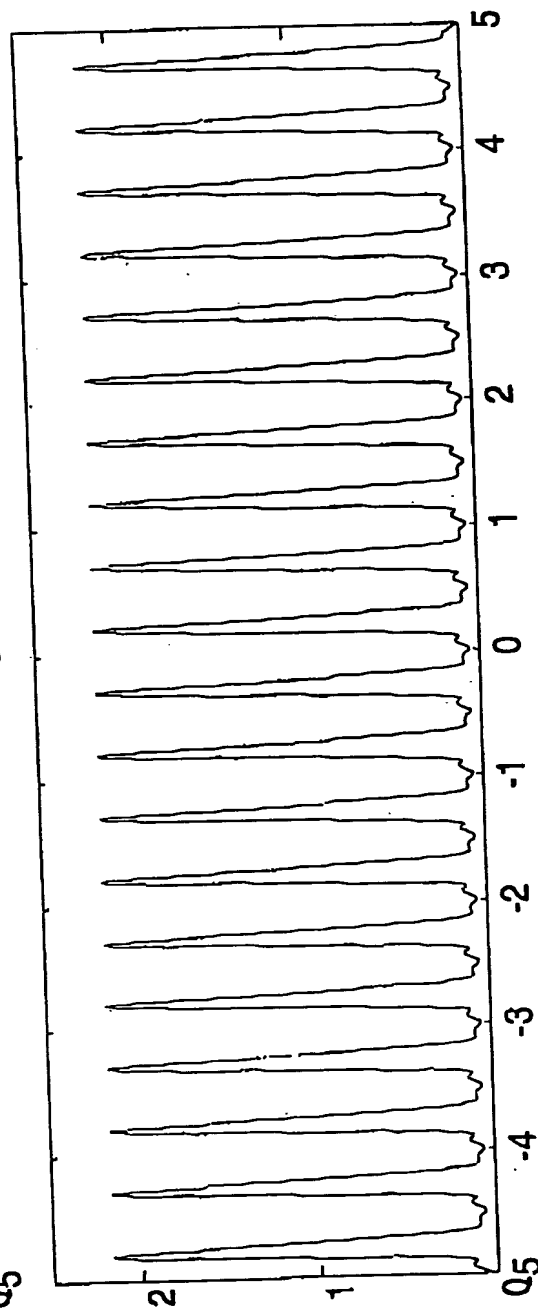
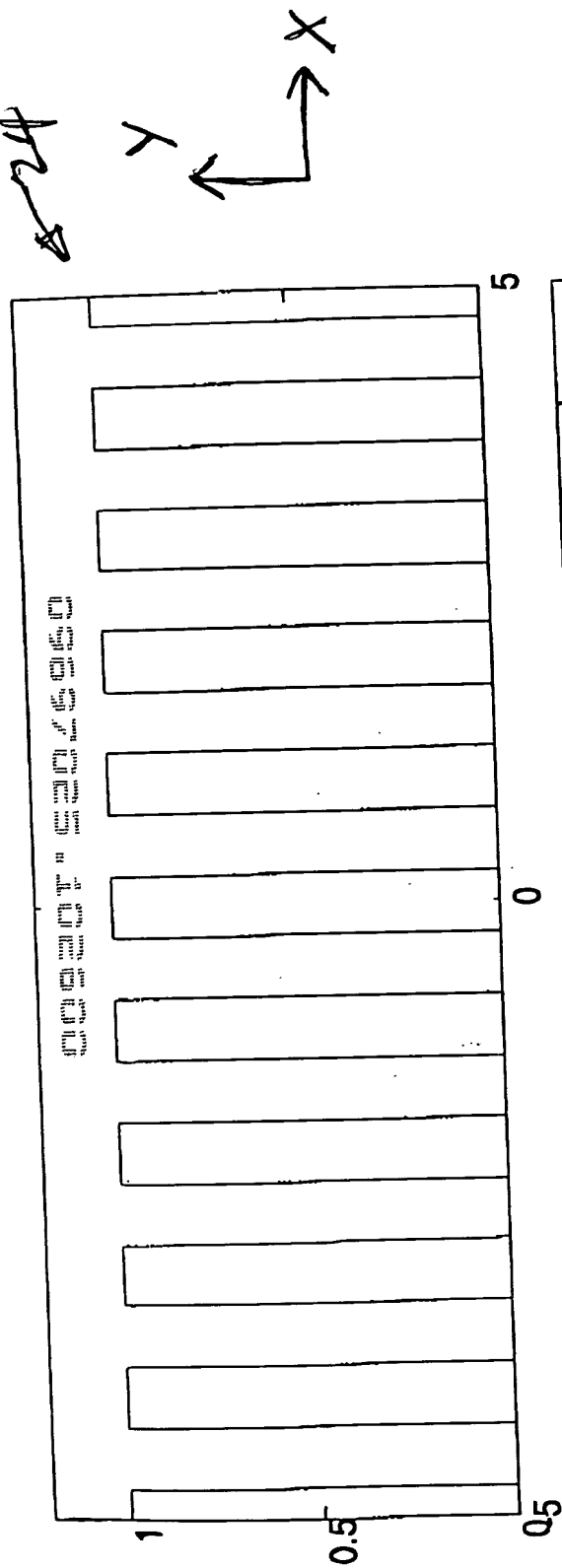


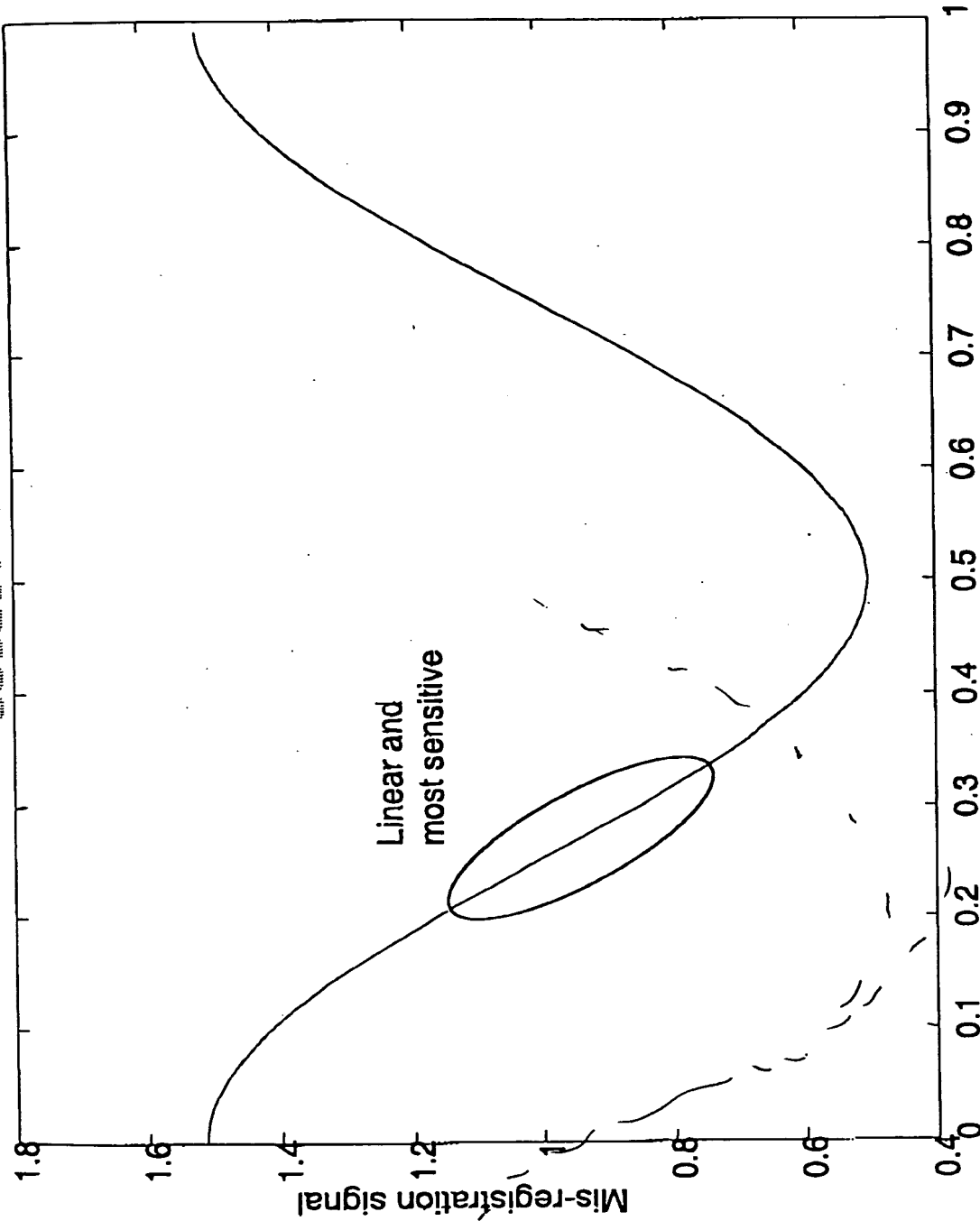
FIG. 2

ALB 3A



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Top: Overlay grating target; Bottom: White light dark field image of target

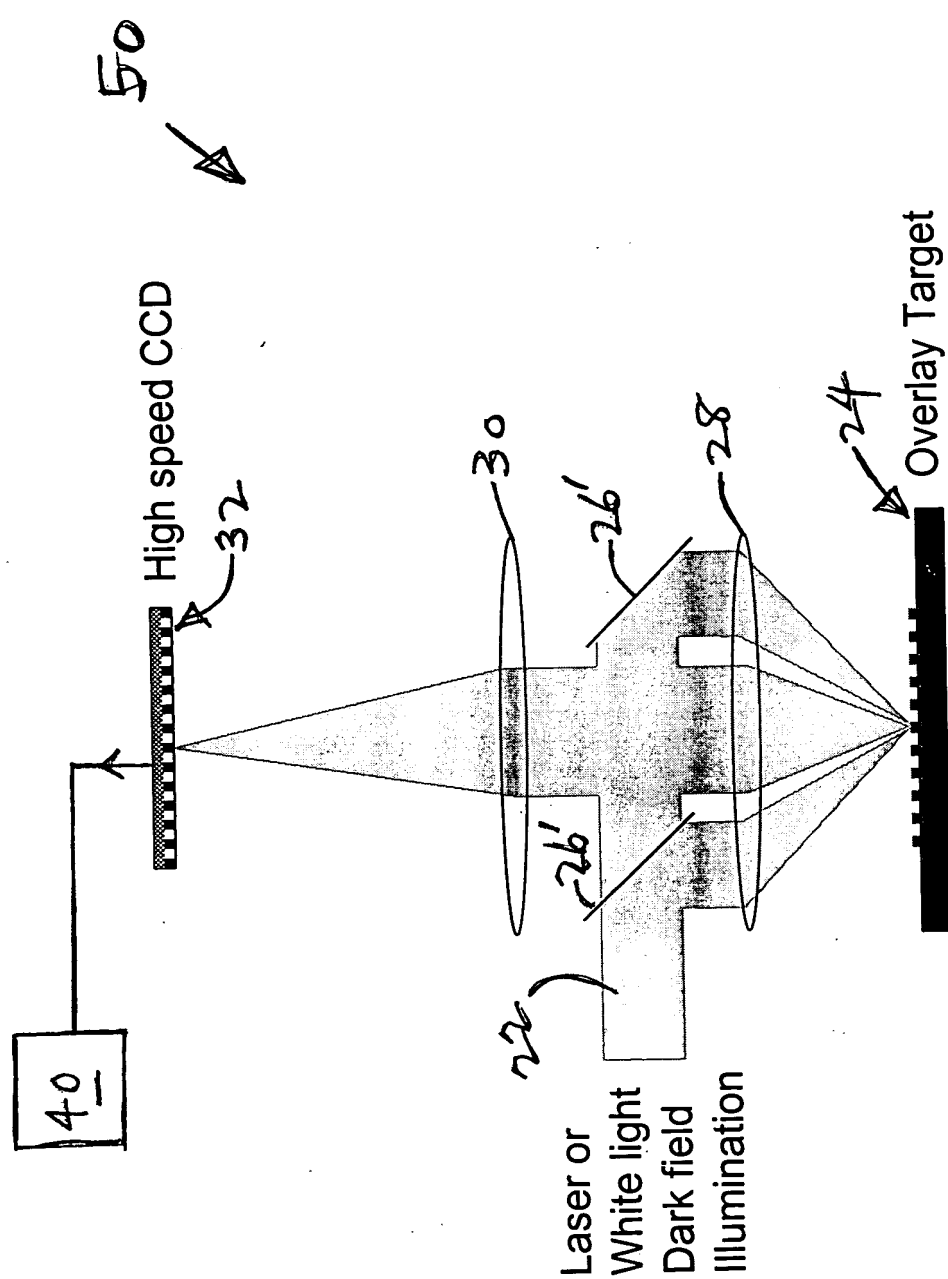


Target shift: $\Delta x(\mu m)$

Figure 6. Mis-registration signal versus grating target shift for 1 μm grating pitch

Fig. 4

Darkfield illumination for overlay error measurement



F165

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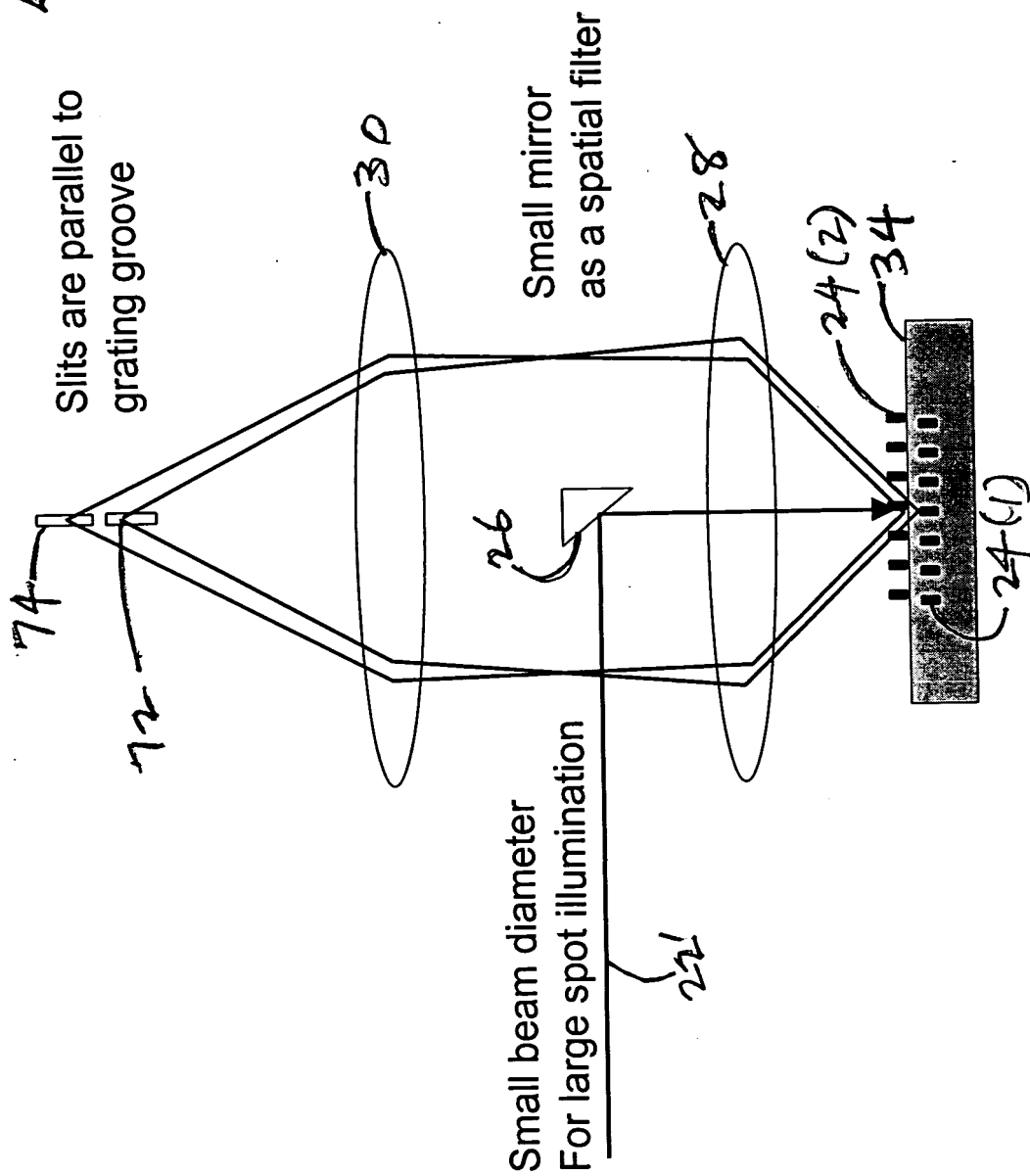


FIG. 6A Laser dark field with dual slit scanning, front view.

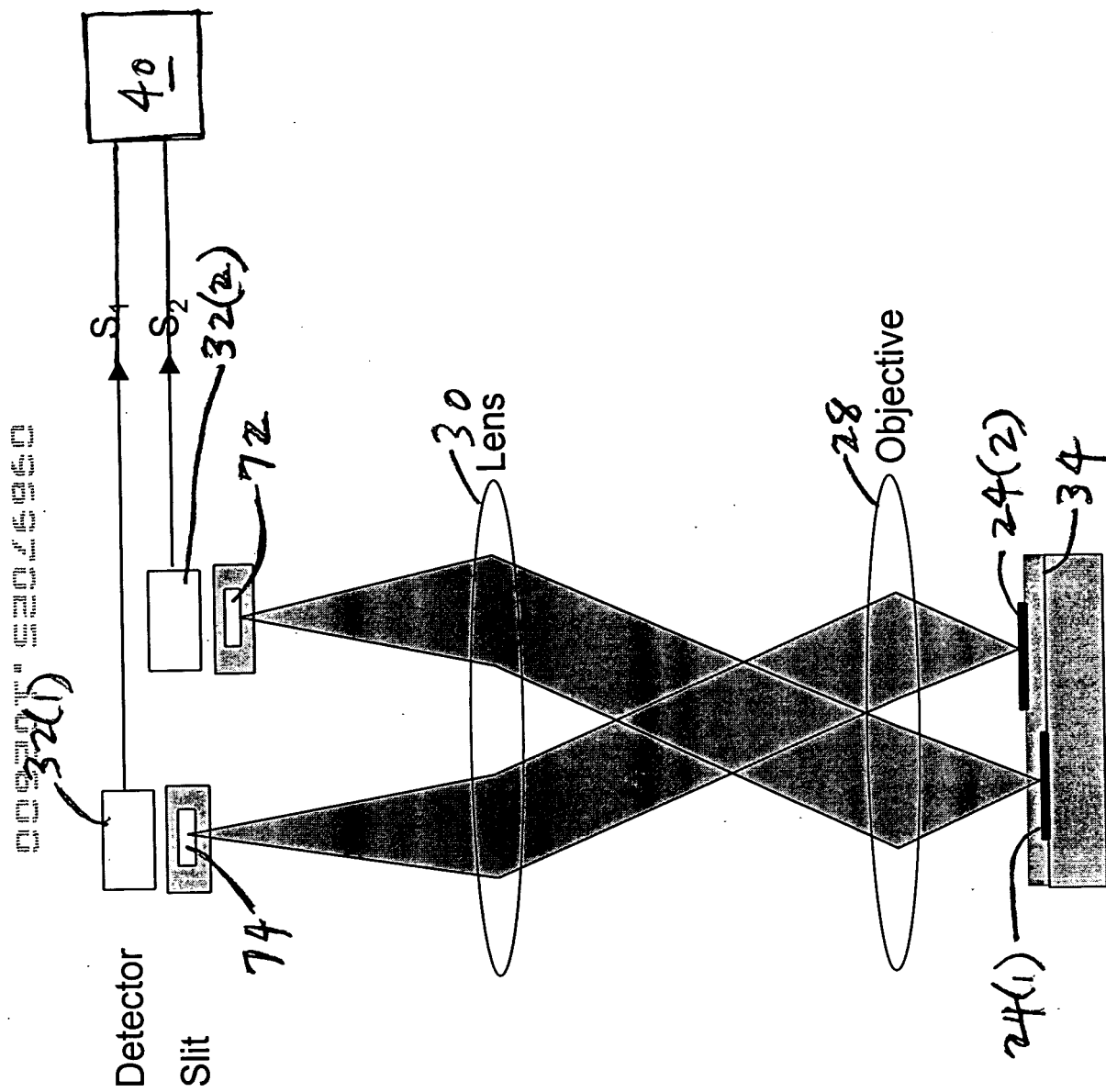


FIG. 6B Laser dark field with dual slit scanning, side view

illumination optics for low-NA imaging

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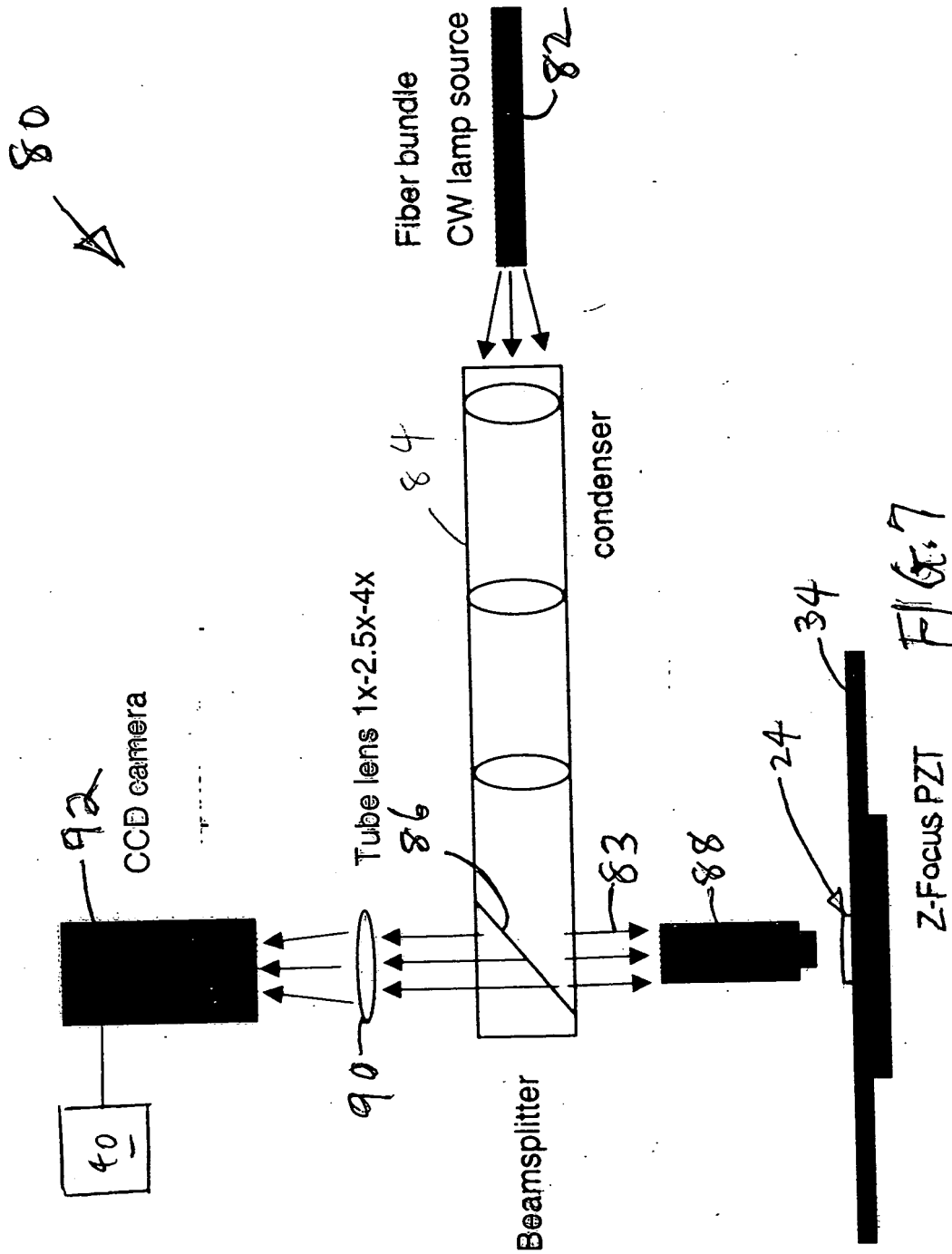


FIG. 9 Example of a two-dimensional grating image
 $I(x,y)$

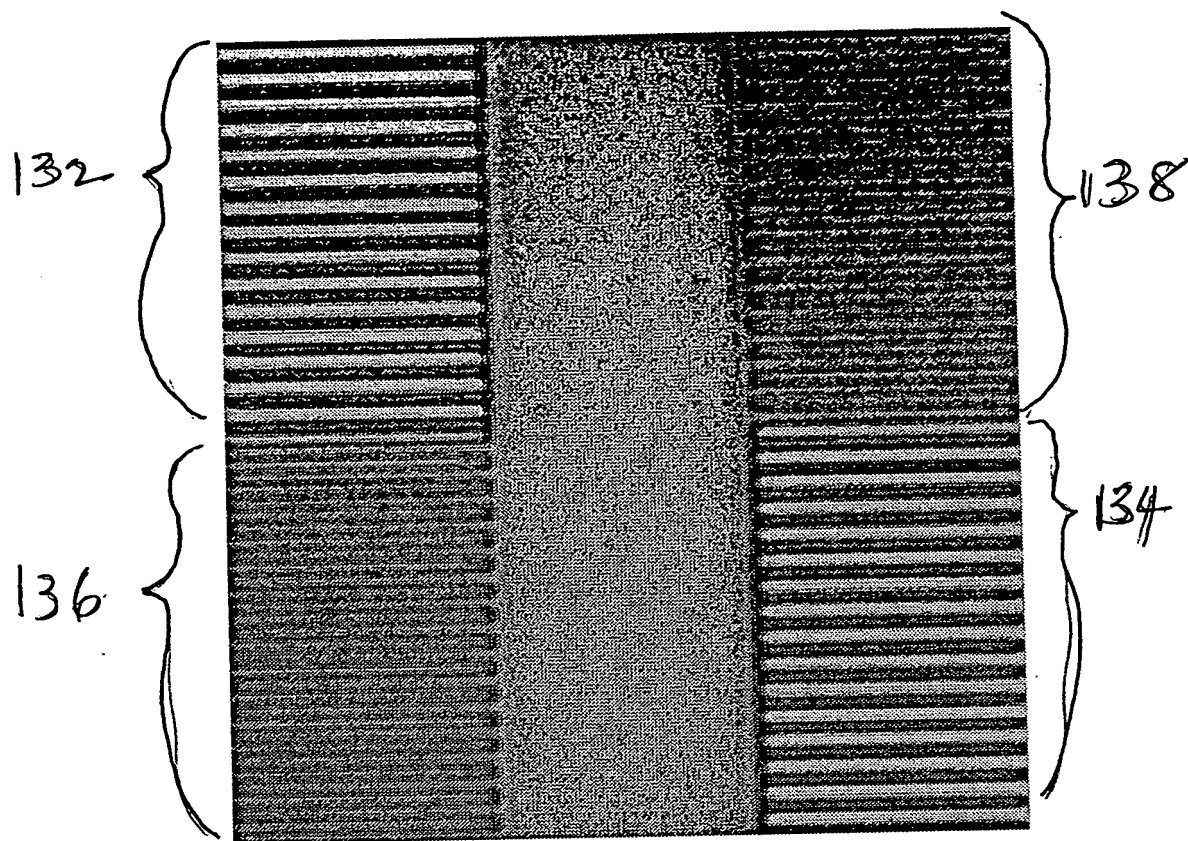


Fig. 10



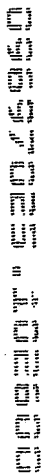
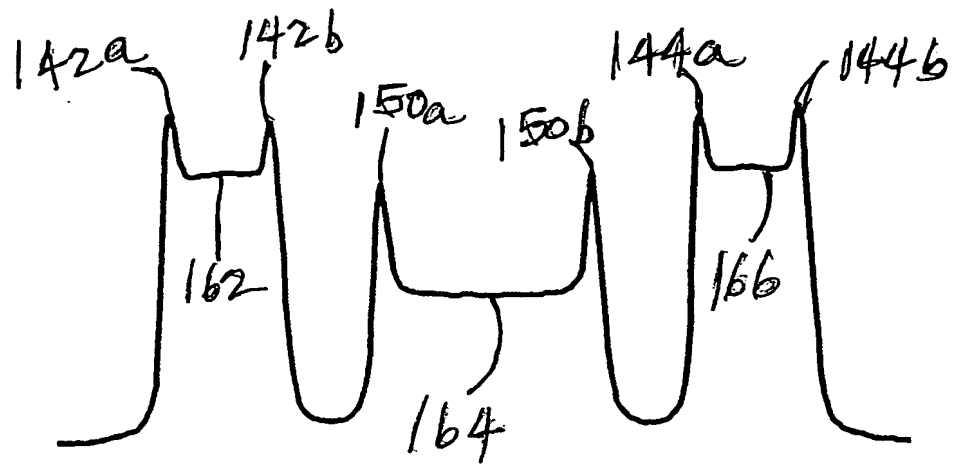
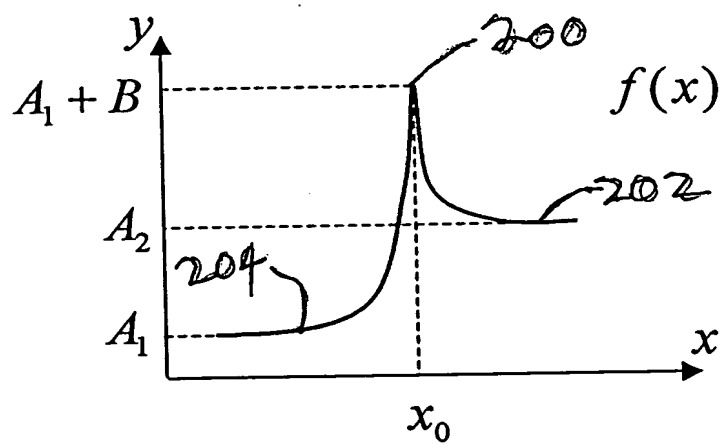


Fig. 12



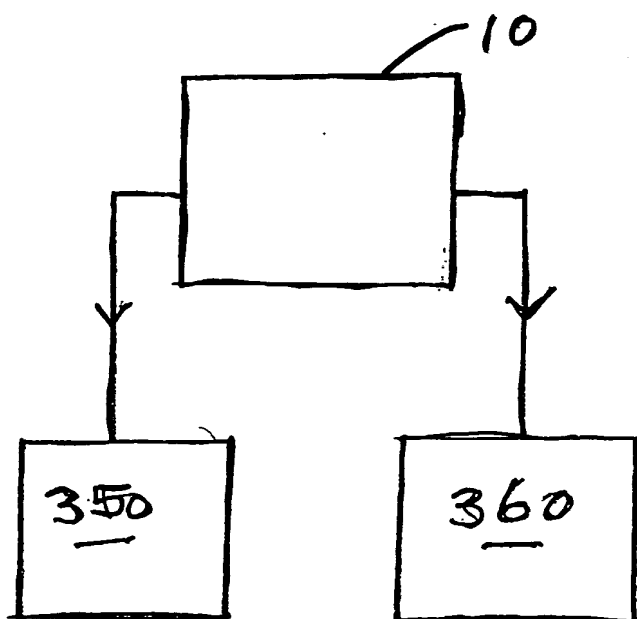
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Flg. 13

[illegible]



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